Claims

1.-9. (canceled)

10. (new) A method for data exchange between network elements, wherein

a first network element is arranged in a first network domain with an address valid in the first network domain, wherein

a second network element is arranged in a second network domain with an address valid in the first network domain, wherein

a network node device is arranged between the network domains for forwarding a data packet to be sent by the first network element to the second network element, wherein

the data packet comprises a characterizing part and a data part, wherein

a destination address characterizing a receiving network element in the characterizing part of the data packet is translated under the control of the network node device into a destination address valid in the second network domain, the method comprising:

entering into the data part by the first network element a source address of the first network element valid in the second network domain.

11. (new) The method as claimed in claim 10, wherein the first network element enters in the data part a destination address of the second network element that is to be specified in the data part of the data packet as the destination address valid in the second network domain.

12. (new) The method as claimed in claim 10, wherein, in order to forward a data packet to be sent by the second network

element to the first network element, the second network element enters in the data part the source address to be specified in the data part of the data packet as the source address of the second network element valid in the first network domain.

13. (new) The method as claimed in claim 11, wherein, in order to forward a data packet to be sent by the second network element to the first network element, the second network element enters in the data part the source address to be specified in the data part of the data packet as the source address of the second network element valid in the first network domain.

14. (new) The method as claimed in claim 10, wherein, in order to forward a data packet to be sent by the second network element to the first network element, the second network element enters in the data part the destination address of the first network element to be specified in the data part of the data packet as the destination address valid in the first network domain.

15. (new) The method as claimed in claim 11, wherein, in order to forward a data packet to be sent by the second network element to the first network element, the second network element enters in the data part the destination address of the first network element to be specified in the data part of the data packet as the destination address valid in the first network domain.

16. (new) The method as claimed in claim 12, wherein, in order to forward a data packet to be sent by the second network element to the first network element, the second network element enters in the data part the destination address of the

first network element to be specified in the data part of the data packet as the destination address valid in the first network domain.

17. (new) The method as claimed in claim 10, wherein the first network element determines the source address using a request procedure executed before the data exchange.

18. (new) The method as claimed in claim 11, wherein the first network element determines the source address using a request procedure executed before the data exchange.

19. (new) The method as claimed in claim 12, wherein the first network element determines the source address using a request procedure executed before the data exchange.

20. (new) The method as claimed in claim 14, wherein the first network element determines the source address using a request procedure executed before the data exchange.

21. (new) The method as claimed in claim 17, wherein the request procedure includes the following steps:

sending a discovery message by the first network element to the second network element arranged in the second network domain with a destination address of the second network element that is contained in the data part and is valid in the first network domain;

receiving the discovery message by the second network element and storing the destination address of the second network element valid in the first network domain;

sending a response message by the second network element to the first network element with a destination address of the first network element that is contained in the data part and is valid in the second network domain; and

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receiving the response message by the first network element and storing the destination address of the second network element valid in the second network domain.

22. (new) The method as claimed in claim 10, wherein the method is performed by a computer program product when the computer program product is executed on a computer unit assigned to a network element.

23. (new) A computer program product containing program code for performing the method as claimed in claim 10 when the computer program product is executed on a computer unit assigned to the network elements.

24. (new) A network element for performing the method as claimed in claims 10.

25. (new) The network element as claimed in claim 24, wherein the network element is designed as a communication terminal communicating according to a packet-oriented method.